

**Hight frequency secondary rectifier**
**STTH2003CT**
**FEATURES**

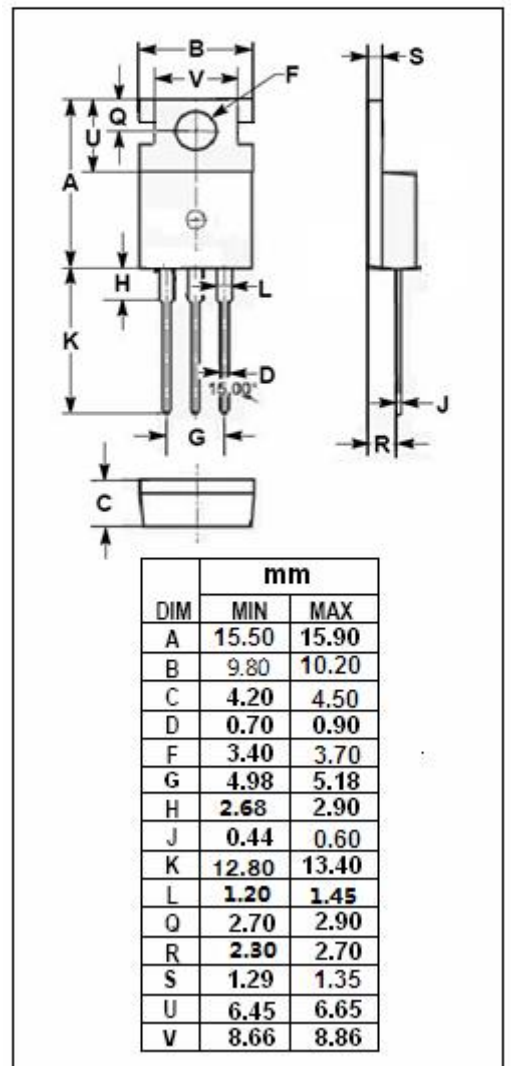
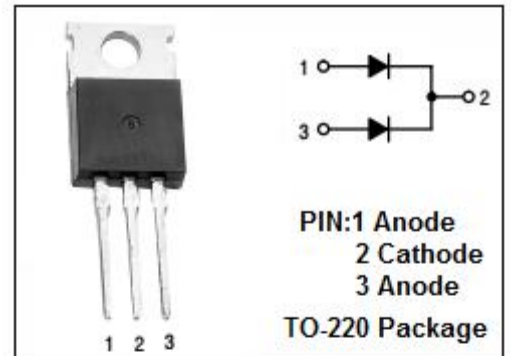
- Guarding for over voltage protection
- Combines highest recovery and reverse voltage performance
- Ultra-fast, soft and noise-free recovery
- Low forward voltage,high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Switching power supply
- Power switching circuits

**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	300	V
I <sub>F(AV)</sub>	Average Rectified Forward Current Per Leg Total device	10 20	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	110	A
T <sub>J</sub>	Junction Temperature	175	°C
T <sub>stg</sub>	Storage Temperature Range	-65-175	°C



**Hight frequency secondary rectifier****STTH2003CT****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>thj-c</sub>	Thermal Resistance, Junction to Case	2.5	°C/W

**ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C)** (Pulse Test: Pulse Width=300 μs, Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>F</sub>	Maximum Instantaneous Forward Voltage	I <sub>F</sub> = 10A ; T <sub>j</sub> =25°C	1.25	V
I <sub>R</sub>	Maximum Instantaneous Reverse Current	V <sub>R</sub> = V <sub>RWM</sub> ; T <sub>j</sub> =125°C V <sub>R</sub> = V <sub>RWM</sub>	300 20	μ A
t <sub>rr</sub>	Maximum Reverse Recovery Time	I <sub>F</sub> =1A;	35	ns

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